SYSTEM FOR MANAGING CONFIGURATION MEMORY WITH TRANSACTION AND REDUNDANCY SUPPORT IN AN OPTICAL NETWORK ELEMENT

CROSS REFERENCE TO RELATED APPLICATION

The present application is related to the following co-pending U.S. Patent application: U.S. Patent application entitled, "System for Managing Configuration Data with Persistence and Synchronization in an Optical Network", having application number 10/062,594, Attorney Docket No. 528, and filed on January 31, 2002, and which is assigned to the assignee of the present application.

FIELD OF THE INVENTION

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The present invention relates generally to communication networks, and more specifically to a system for updating and maintaining memory configuration databases across a network.

BACKGROUND OF THE INVENTION

Large computer networks, such as Wide Area Networks (WAN) or Internet backbone systems often incorporate various types of network devices (nodes) and network protocols. For example, for Synchronous Optical Network (SONET) systems, most communication between transport nodes uses the OSI (Open System Interconnection) over the DCC routing protocol to establish and route traffic between two nodes.

The OSI environment includes data communication protocols to manage data movement among network nodes and uses application-oriented protocols to ensure that